

Appl. No. 09/759,395
Amdt. Dated April 12, 2004
Reply to Office Action of Feb. 10, 2004

REMARKS

Claims 1-37 are pending in the application with claims 25-37 being withdrawn from consideration in response to a restriction requirement. Claims 1-3, 6-11 and 14-24 stand rejected under 35 U.S.C. 102(b) as being anticipated by Mika et al. (6,233,4870.) Claims 4, 5, 12 and 13 have been indicated as being allowable if rewritten in independent form to include all of the limitations of the base claims and any intervening claims.

The rejection of claims 1-3, 6-11 and 14-24 as being anticipated by Mika et al. is respectfully traversed. It is again submitted that the Mika reference fails to disclose the steps of applicants' claimed invention. Further, the teaching of Mika would not render applicants' claimed invention obvious. Applicant requests reconsideration in view of the following remarks. Further, if the Examiner continues with the rejection, applicant respectfully requests sufficient detail in the rejection as to where each individual step is found in the reference so that applicant may more fully address the rejection in further prosecution.

In response to applicant's arguments submitted on November 24, 2003, the Examiner pointed to claims 7, 27, 49, 50 and 68 as well as Figs. 1-6 and cols. 10-14 of Mika et al. as explicitly showing and claiming cardiac pacing as an integral feature of the Mika invention. The Office Action further provided "timing is just one of the pacing parameters optimized by the Mika reference."

First, it is submitted that the use of the method of Mika in a pacemaker does not in and of itself address the arguments made in applicants' last amendment. The reference must teach or inherently disclose each of the elements or steps of applicants' claimed invention to anticipate. The Examiner has not pointed to how the Mika reference does this. Specifically, there is no teaching of step (a) of claim 1 of "determining cardiac performance associated with the current set of N pacing parameters". Applicants are unable to identify any teaching in Mika regarding a **determination of cardiac performance.**

Nor is step (b) of claim 1 shown. This limitation requires "repeating steps (c) through (e) for $i = \text{one to } N$, where i represents which of the N pacing parameter is being adjusted". Mika does not teach a method for adjusting **pacing parameters** at all, particularly not in the way presented in applicants' claims. While Mika does teach a device that includes pacing capability, the parameters that are adjusted are **sensing parameters** for the ETC process, specifically the beginning and ending times of an alert time window and the sensitivity level for the detection circuit. See col. 2, lines 50-53 and col. 4, lines 45-53. Thus, contrary to the statement in the Office Action, the Mika reference does not teach the adjusting of timing or any other pacing parameter. Rather, it teaches **adjusting sensing parameters**, particularly those associated with an alert window for the ETC process. Claim 7 of Mika merely states that the cardiac condition, which is primarily defined as heart rate, may be controlled by a pacemaker. There is no disclosure of monitoring cardiac performance while a pacing parameter is adjusted. In fact, the

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only discussion the undersigned attorney has been able to identify of varying pacing parameters is in connection with the physician setting those parameters at implant. See in particular, col. 23, lines 41-44 "After implantation of the pacemaker/ETC device 21 the pacing parameters are set (including, inter alia, the pacing voltage, the pacing pulse width, and other relevant pacing parameters,)" See also, col. 23, lines 55-58. There seems to be not teaching or suggestion of adjusting pacing parameters and then looking at cardiac performance.

With respect to the teaching of Mika, the purpose of setting multiple detection parameter sets based on different heart rates is to provide for safe timing of the delivery of ETC signals, not pacing pulses. (col. 2, lines 34-38.) Mika monitors the timing conditions of a patient's heart at different heart rates to identify a safe time window for the delivery of the ETC (non-pacing) signals. This to be distinguished from the present application which teaches adjusting multiple pacing parameters and determining an optimal set of pacing parameters to achieve improved hemodynamic performance.

The arguments above with regard to claim 1 apply equally as well to independent claims 9 and 17 and the claims that depend therefrom. For these reasons, reconsideration and withdrawal of the rejections is warranted.

In conclusion, Mika does not teach, suggest or disclose a method of optimizing a set of pacing parameters. More particularly, Mika does not teach either the step of determining cardiac performance or the step of adjusting pacing parameters. Absent such teaching, Mika cannot anticipate applicants' claimed invention under 35 U.S.C. §102(b). Reconsideration and withdrawal of the rejection of claims 1-3, 6-11 and 14-24 is therefore respectfully requested. Allowance and passage to issue of claims 1-24 is again respectfully requested.

Respectfully submitted,
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